# 1.0 INTRODUCTION

As set forth in Federal Aviation Regulation (FAR) Part 150, *Airport Noise Compatibility Planning*, the FAR Part 150 process is structured to develop two key study products:

- Noise Exposure Maps (NEMs) that depict areas exposed to existing and future aircraft-related noise; and
- A Noise Compatibility Program (NCP) that outlines strategies for reducing noise impacts on the communities surrounding the Airport.

The NEMs presented in Volume I of this FAR Part 150 Study illustrate that the operational strategies in place at Lunken Airport (the Airport) over the years have worked to mitigate the impact of aircraft noise on the community. As can be seen, the existing Day Night Average Sound Level (DNL) dBA noise contours do not extend far beyond the airport's boundaries. This is an example of how noise exposure can be reduced and managed at an airport through the cooperative efforts of the airport, Federal Aviation Administration (FAA), and the communities surrounding the airport.

Despite the fact that the 65 DNL contour does not extend far beyond the airport boundaries, there is a community perception that aircraft noise annoyance extends into the residential areas of the surrounding communities. Therefore, the Airport FAR Part 150 Study team and the City of Cincinnati opted to analyze aircraft noise beyond the FAA recognized 65 DNL noise threshold, and modeled to the 55 DNL contour. Noise monitoring was included as part of the Part 150 and details are included in Volume I Chapter 4, Section 4.4.1 *Noise Monitoring Data* and **Appendix G**. These noise monitors were placed in areas from which complaints were received by the Airport and in areas requested by the study's Planning Advisory Committee (PAC).

The NCP for the Airport presented in Volume II evaluates three types of strategies that can be adopted to improve the compatibility between airport operations and adjoining communities:

- Operational Strategies
- Land Use/Preventative Strategies
- Management/Administrative Strategies

A program for implementing the NCP is also presented. A summary of the public involvement process and its role in the development of the NCP is presented as well.

### 1.1 STUDY APPROACH

The first phase of this FAR Part 150 Study focused on development of baseline NEMs depicting (1) areas exposed to existing 2002 aircraft noise levels and (2) areas projected to be exposed to DNL of 55 dBA, 60 BA, 65 dBA, 70 dBA, or 75 dBA in the five-year time frame (through 2007). Noise mitigation strategies currently in use at the Airport were reflected in the noise contours prepared for the 2002 and the 2007 baseline NEMs.

With baseline noise conditions established, the next phase of the analysis focused on preparing the first ever NCP for the Airport. The NCP evaluated a wide range of options for resolving noise issues. As previously stated, these options include operational strategies, land use strategies, and management/administrative strategies.

At the time of printing this document, the City, PAC members and the Part 150 Study team are in the process of obtaining additional public comment on several recommended abatement measures. Therefore, following the May 20, 2004 Public Workshop, we will review public comments and arrive at a final position; make the necessary changes and update the document at that time.

#### 1.1.1 Operational Strategies

The evaluation of operational strategies addressed the effectiveness of the noise mitigation measures currently in use at the Airport. The mitigation measures currently used at the Airport are part of Lunken's "Fly Neighborly" Program.

The "Fly Neighborly" program is voluntary and includes a progression of noise mitigation efforts to address community issues. The details by the "Fly Neighborly" Program are found in Chapter 4.0 Section 4.1 *Existing Noise Abatement Procedures* in Volume I

## 1.1.2 Land Use Strategies

Voluntary land use management techniques such as comprehensive planning and zoning initiatives, were also examined. These techniques can be used by surrounding municipalities to discourage future development that would be incompatible with airport operations or to encourage redevelopment of areas around the airport with compatible land uses. Land use in the vicinity of the Airport is controlled under several municipal jurisdictions. These jurisdictions are neighborhoods in the City of Cincinnati limits which are Oakley, Hyde Park, Mt. Lookout, Columbia/Tusculum Madisonville, California, East End, Mt. Washington, Linwood; the cities of Norwood, Maderia, the Village of Indian Hill, Fairfax, Mariemont, Newtown and Anderson Township. The cities in Kentucky are: Ft. Thomas, Highland Heights, and Silver Grove.

### 1.1.3 Management/Administrative Strategies

The City of Cincinnati, as owner and operator of the Airport, has the management responsibility for the Airport. The Airport management staff is the ambassador to local jurisdictions and local citizens. They are to keep local communities abreast on actions affecting the airport and the community. Airport management is closely involved with City officials in developing a comprehensive plan and land use regulations that:

- Preserve the viability of the Airport uses;
- Mitigate potential noise impacts on surrounding land uses;
- Preserve adequate space for Airport operations, expansion, and safety zones and;
- Protect Airports and Airport environs from development of incompatible land uses.

Management and administrative strategies relate to these principles of airport operation.

In addition to the "Fly Neighborly" Program, the City of Cincinnati has, for several years, had a noise coordinator who receives and responds to noise complaints and worked with the FAA Contract Tower Personnel, airfield/Airport users, and communities to maximize their use of noise abatement flight procedures.

The City of Cincinnati has recently enhanced this function by assigning a full-time noise compatibility planner to the Airport. Additionally, the City has purchased and installed AirScene, a hardware and software systems associated with aircraft flight tracking system. Noise complaints from the community in the future can therefore be accurately investigated and responded.

#### 1.2 Consultation and Public Involvement

Inherent in the FAR Part 150 process is participation by those most affected by aircraft noise: people who live and work in the impacted areas. The goals of the FAR Part 150 process can only be realized when the Airport, air traffic control personnel, and surrounding communities work together to develop a noise compatibility plan. Participation by the local, regional, state, and federal agencies involved with airport and community planning is also critical to the process.

To provide a platform for these groups' input into the FAR Part 150 Study, a study committee, the PAC was established. The PAC is comprised of community representatives, Airport users, the FAA, the county and regional planning groups. These committee members provide input on issues such as operational changes to reduce noise impacts, land use strategies, and ensure that the views of area homeowners are represented in the study.

The roles of the PAC are discussed more fully in this Volume II Chapter 6.0, *Coordination and Public Involvement*.

In conjunction with the PAC's efforts, public involvement program was conducted during the FAR Part 150 Study. Three informational newsletters were published and mailed to neighborhoods surrounding the Airport. Three Public Workshops were conducted to both gather information from, and disseminate information to, community residents about study analyses and findings and to allow interested people the opportunity to comment on the study. At these meetings, airport staff and the consultant team described the study process and recommendations. NEMs and other study materials were made available for viewing. Written comments submitted by those attending the workshops were made a part of this FAR Part 150 Study Technical Report and can be found in Appendices C, C1, C2, D, D1, D2, E, E1, and E2. The first public workshop was conducted on November 25, 2002, and introduced the study process, solicited public opinion on the effectiveness of current noise control measures, and presented the existing NEM. The second workshop, conducted on July 15, 2003, presented the future 2007 NEM and provided preliminary recommendations concerning those strategies that should be continued, modified, and/or added to the NCP. The final recommendations of the study will be presented at the third Public Workshop on May 20, 2004 and at the Public Hearing on June 17, 2004. Comments received at the public hearing, as well as the official transcript of the public hearing, will be included in **Appendix J**.

#### 1.3 STUDY DOCUMENTATION

Volume I of this FAR Part 150 Study presents existing 2002 and future 2007 baseline NEMs for the Airport. Volume II outlines the NCP including specific recommendations for mitigating aircraft noise impacts.

This volume is organized as follows. Chapter 2.0 identifies operational noise mitigation strategies evaluated for use at the Airport, including a review of the continued applicability of existing noise abatement procedures. Land use strategies are evaluated in Chapter 3.0. Chapter 4.0 evaluates the management, administrative and other recommendations. Chapter 5.0 outlines

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an implementation plan for the NCP, describing the steps that should be followed to effectively carry out the NCP. Parties responsible for accomplishing these steps are also identified in Chapter 5.0, along with a schedule for implementation. Chapter 6.0 details public involvement efforts completed during the development of the NCP.